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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|-----------------------|------------------------------------|------------------|
| 10/728,299 | 12/04/2003 | Martin Joseph Crippen | ROC920030321US1 | 7932 |
| 30206 | 7590 | 11/21/2005 | | |
| IBM CORPORATION ROCHESTER IP LAW DEPT. 917 3605 HIGHWAY 52 NORTH ROCHESTER, MN 55901-7829 | | | EXAMINER DATSKOVSKIY, MICHAEL V | |
| | | | ART UNIT 2835 | PAPER NUMBER |

DATE MAILED: 11/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/728,299 | CRIPPEN ET AL. | |
| | Examiner | Art Unit | |
| | Michael V. Datskovskiy | 2835 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 8-11 is/are rejected.
- 7) ☒ Claim(s) 2-7 and 12-15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>12/04/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Reference number 20 cited in the specification on page 6, line 3 of the paragraph [0024]. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claims 1, 2, 8 and 12 are objected to because of the following informalities: Claim 1 claims: "...a supporting element disposed in the housing assembly and mounted in a generally free-floating relationship thereto..."; claim 2 claims a "free-floating relationship", and claims 8 and 12 claim "a free-floating circuit board". However, the specification discloses: "The printed circuit board 40 is mounted for limited free-floating movement within the housing assembly, in a vertical direction" (page 7, lines 9-

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10 of the paragraph [0025], underscored by examiner), which is much narrower than what is claimed in claims 1, 2, 8 and 12 . Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 8-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Kosugi.

Kosugi teaches an electronic device, Figs.1-4, (col. 5, lines 1-34) comprising: a housing assembly; a supporting element 10 disposed in the housing assembly and mounted in a vertically free-floating relationship thereto; a heat source 1 mounted on the supporting element, a heat sink 21 surface in the housing assembly in close proximity to the heat source 1, and, at least one compliant compression element 55 (relatively thin and resilient pad made of an open cell foam material compressed between a circuit board 10 and a bottom wall 51 of the housing) disposed within the housing assembly and being preloaded for resiliently loading the heat source into continuous thermal engagement with the heat sink surface, and compensate for displacements of the supporting element and expansion of the compliant compression element by heat.

Regarding to the claims 8-11: The method steps are necessitated by the device structure as Kosugi discloses it.

Allowable Subject Matter

5. Claims 8 and 12 would be allowable if rewritten or amended to overcome the objection, set forth in this Office action.

6. Claims 3-7 and 13-15 would be allowable if rewritten to overcome the objection set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: a housing assembly, a printed circuit board disposed within the housing assembly and a vertically free-floating relationship thereto; a processor mounted on the printed circuit board; a heat sink surface disposed in the housing assembly in close proximity to the processor, and at least one compliant compression element disposed within the assembly and being preloaded for resiliently loading the processor into a thermal engagement with the heat sink surface, wherein said housing assembly is placed in a blade server module. The closest reference by Liu et al (US Patent 6,898,081) discloses a blade server module comprising: a housing assembly 3, a printed circuit board 1; a processor 11 mounted on the printed circuit board; a heat sink surface disposed in the housing assembly in close proximity to the processor, and at least one compliant compression element 31 disposed within the assembly and being preloaded for resiliently loading the processor into a thermal engagement with the heat sink surface. However, Liu et al do not teach said circuit board being disposed within

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the housing assembly and a vertically free-floating relationship thereto, and examiner does not consider as an obvious to combine the reference by Liu et al with any of cited in PTO Form 892 references.

8. The prior art made of record provided in the PTO Form 892 and not relied upon is considered pertinent to applicant's disclosure.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael V. Datskovskiy whose telephone number is (571) 272-2040. The examiner can normally be reached on 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on (571) 272-2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael V Datskovskiy
Primary Examiner
Art Unit 2835

11/17/2005